I. GENERAL

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF EMERGENCY VEHICLE OPTICOM PRE-EMPTION EQUIPMENT FOR THE EASTBOUND AND WESTBOUND APPROACHES OF MD 231 (PRINCE FREDERICK ROAD) AT MD 381 (BRANDYWINE ROAD) IN CHARLES COUNTY. MD 231 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

- 1. THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULLY ACTUATED MODE, WITH THE MD 231 (PRINCE FREDRICK ROAD) APPROACHES RUNNING CONCURENTLY. AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE IS PROVIDED FOR EASTBOUND MD 231 (PRINCE FREDERICK ROAD), THERE ARE PEDESTAL MOUNTED HIB'S INSTALLED FOR EASTBOUND AND WESTBOUND DIRECTIONS OF MD 231 (PRINCE FREDERICK ROAD). MD 381 (BRANDYWINE ROAD) APPROACH OPERATES AS A SEPARATE PHASE.
- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: MD 104.02-01, MD 104.03-09, MD 104.03-11 AND MD 104.03-13.

<u>CONTACTS</u>

DISTRICT 5

OFFICE OF TRAFFIC AND SAFETY

MS. KIMBERLY TRAN ASSISTANT DISTRICT ENGINEER - TRAFFIC 410-841-1019

MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630

MR. MIKE HUBER DISTRICT UTILITIES ENGINEER - UTILITIES 410-841-1039

MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630

MR. JAMES FOLDEN ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 410-841-1031

MR. ED RODENHIZER MANAGER SIGNAL OPERATIONS 410-787-7650

MR. JOHN S. MAYS ASSISTANT DISTRICT ENGINEER - MAINTENANCE 410-841-1013

MR. EUGENE BAILEY MANAGER SIGN OPERATIONS 410-787-7670

MR. MIKE STOCKER SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

<u>EQUIPMENT LIST</u>

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADIMISTRATION

NONE

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

DESCRIPTION ITEM NO./ QUANTITY CAT CODE

1001 MAINTENANCE OF TRAFFIC 8032 4-CONDUCTOR OPTICOM CABLE DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764 OPTICON NO. 721 DETECTOR EYE 8047 EΑ

	$\bigcirc G$	(G)	(\mathbf{G})	(G)	(G)	(G)	(\mathbf{G})	(
PHASE 1 AND 6	⊲G/G	⊲G/G	G	R	R	R	R	R	H
1 AND 6 CHANGE	⊲Y/G	⊲Y/G	G	R	R	R	R	R	
PHASE 2 AND 6	G	G	G	G	G	G	R	R	<u>↓</u>
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	─
PHASE 4	R	R	R	R	R	R	G	G	$oxed{\mid}$
PHASE 4 CHANGE	R	R	R	R	R	R	Y	Y	H 4
FLASHING OPERATION	I FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	†

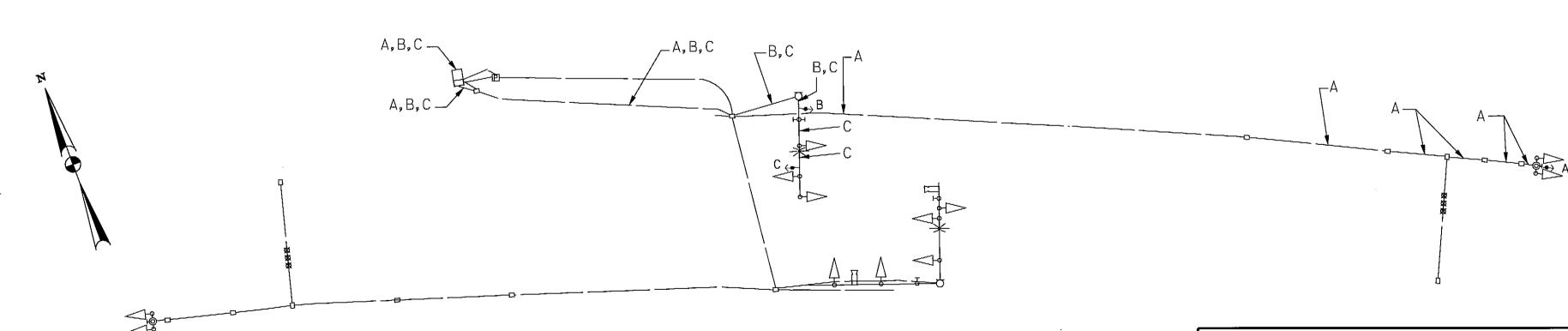
PHASE CHART

FIRE HOUSE PRE-EMPTION PHASE 2	R	R	R	G	G	G	R	R	
PRE-EMPTION CLEARANCE	R	R	R	G	G	G	R	R	\exists
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	G	R	R	→

FIRE HOUSE PRE-EMPTION PHASE 6	⊲G/G	⊲G/G	G	R	R	R	R	R	$\prod_{k=1}^{n-1} \mathbb{A}_{k}$
PRE-EMPTION CLEARANCE	⊲Y/G	⊲Y/G	G	R	R	R	R	R	-
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	G	R	R	>

TOD NO: XX647-03 SHA NO: CH211B51 MD 231 @ MD 381

A,B,C - 4 CONDUCTOR OPTICOM CABLE



WIRING DIAGRAM (NOT TO SCALE)

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 231 (PRINCE FREDERICK ROAD) AND MD 381 (BRANDYWINE ROAD) PATUXENT, MARYLAND

GENERAL INFORMATION SHEET										
SCALE N/A	DATE_	04/2011 (CONTRACT NO	XX6475185						
DESIGNED BY	AMH OF KCI	COUNTY	CHAP	ILES						
DRAWN BY	AF OF KCI	LOGMILE	080231	05.54						
CHECKED BY	JFL OF KCI	TIMS NO	K52	20						
F.A.P. NO	SEE TITLE SHEET	TOD NO.	·							
TS NO. 4711 A	DRAWING SG-2	OF 2	SHEET NO.	2 OF 2						

936 Ridgebrook Road Sparks, Maryland 21152 Telephone: (410) 316-7800 Fax: (410) 316-7818

PLOTTED: "01:31 PM on Tuesday, April 12, 2011" FILE: M:\2009\01090619.19\drawings\pSG-N000_MD231.dgn